AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. In a communication system in which users communicate through a switched telephone network, a private communication network for facilitating communication among a plurality of member user telephone sets said private communication network comprising:

a network call manager including:

a telephone network interface for establishing a telephone connection with each of said plurality of member users over a plurality of channels of said switched telephone network, respectively,

a switch matrix, coupled to said telephone network interface, for providing an information signal received by said telephone network interface over one of said plurality of channels simultaneously to a plurality of others of said channels via said telephone network interface, and

a controller for configuring said switch matrix in response to talk request signals received over a selected one of said plurality of channels; and

a plurality of eligible member user telephone sets disposed for simultaneous communication over said plurality of channels, each of said eligible member user telephones sets including means for generating one of said talk request signals, at least some of said eligible member user telephone sets being connected to the private communication network through a wireless communications system.

2. (Amended) The private communication network of claim 1 wherein said controller [means including] includes means for identifying said selected one of said plurality of channels by choosing among ones of said talk request signals received over corresponding ones of said plurality of channels.

3. (Amended) The private communication network of claim 1 wherein a selected one of said plurality of [authorized] eligible member user telephone sets includes:

vocoder means for digitally processing input information in order to produce a sequence of vocoder data packets, and

modem means for generating said information signal using said vocoder data packets.

4. (Amended) The private communication network of claim 3 wherein said modem means includes means for multiplexing said talk request [signal] signals with said vocoder data packets and for using the result of the multiplexing during formation of said information signal.

5. (Amended) The private communication network of claim 1 wherein said controller [means] includes means for verifying that said information signal received over said selected one of said plurality of channels was generated by a given one of said plurality of [authorized] eligible member user telephone sets.

6. (Amended) The private communication network of claim 5 wherein said controller [means] includes means for configuring said telephone network interface to call other ones of said [authorized] eligible member user telephone sets subsequent to receipt by said network call manager of said information signal from said given one of said plurality [authorized] of eligible member user telephone sets.

7. (Amended) The private communication network of claim 1 further including wireless network means for operatively coupling one of said plurality of [authorized] eligible member user telephone sets to a corresponding one of said plurality of channels.

8. (Amended) The private communication network of claim 1 wherein each of said plurality of [authorized] eligible member user telephone [set] sets includes means for generating an encrypted signal by encrypting an information signal provided by one of said member users, said encrypted signal being transmitted over a corresponding one of said plurality of channels.

9. (Amended) The private communication network of claim 8 wherein each of said plurality of [authorized] eligible member user telephone sets includes means for recovering one

of said information signals from one of said encrypted signals transmitted over a corresponding one of said channels.

10. (Amended) In a communication system in which users communicate through a switched telephone network, a network call manager for facilitating private communication simultaneously among a plurality of member user telephone sets, at least some of said member user telephone sets being connected to [the] a private communication network through a wireless communications system, said network call manager comprising:

a telephone network interface for establishing a telephone connection with each of a plurality of said member user telephone sets, including at least a plurality of said member user telephone sets that are connected to the private communication network through the wireless communications system, over a corresponding plurality of channels of said switched telephone network;

a switch matrix, coupled to said telephone network interface, for providing an information signal received over a selected one of said plurality of channels simultaneously to other ones of said plurality of channels via said telephone network interface; and

controller means for configuring said switch matrix in response to control information received over at least one of said plurality of channels.

11. The network call manager of claim 10 wherein said controller means includes a controller for selecting said selected one of said plurality of channels in response to a talk request signal received over said selected one of said plurality of channels.

12. (Amended) The network call manager of claim 11 further including wireless network means for establishing communication between at least one of said member user[s] telephone sets and said switched telephone network.

13. (Amended) The network call manager of claim 12 wherein said controller means includes arbitration means for choosing said selected one of said plurality of channels on the basis of talk request signals received from ones of said member user[s] telephone sets over corresponding ones of said plurality of channels.

14. (Amended) The network call manager of claim 13 wherein said controller means includes means for informing ones of said member user[s] telephone sets via corresponding ones of said plurality of channels of the identity of a selected member user[s] telephone set providing said information signal over said selected one of said plurality of channels.

15. (Amended) The network call manager of claim 14 wherein said controller means includes means for informing at least one of said member user[s] telephone sets via a corresponding one of said plurality of channels of the identities of ones of said member user[s] telephone sets associated with corresponding ones of said plurality of channels.

16. (Amended) A method for facilitating private communication among a plurality of eligible member user telephone sets in [In] a private communication network system in which users communicate through a switched telephone network, [a method for facilitating private communication among a plurality of eligible member user telephone sets,] at least some of said eligible member user telephone sets being connected to [the] a private communication network through a wireless communications system, said method comprising the steps of:

establishing a telephone connection between a network call manager and each of a plurality of telephone channels of said switched telephone network, each of said plurality of telephone channels being associated with one of said plurality of eligible member user telephone sets;

providing an information signal received at said network call manager over a selected one of said plurality of telephone channels from an active one of said eligible member user telephone sets simultaneously to a plurality of other ones of said eligible member user telephone sets over other ones of said plurality of telephone channels;

generating talk request signals substantially simultaneously at a plurality of said eligible member user telephone sets for transmission to said network call manager via said switched telephone network; and

choosing said active eligible member user telephone set on the basis of said talk request signals received at said network call manager.

17. The method of claim 16 further including the step of identifying said selected telephone channel by choosing among ones of said talk request signals received over corresponding ones of said plurality of telephone channels.

18. (Amended) The method of claim 16 further including the steps of digitally processing information [from said active member user] in order to produce a sequence of vocoder data packets for modem transmission to said network call manager.

19. (Amended) The method of claim 16 further including the step of coupling said information signal from said active member user[s] telephone set through a wireless communication network to said selected one of said plurality of telephone channels.

20. (Amended) The method of claim 16 further including the steps of:

encrypting information signals generated within the one of said plurality of eligible member user telephone sets [associated with said active eligible member user];

transmitting the encrypted information signals to said network call manager; and

decrypting the encrypted information signals received from said network call manager at the ones of said plurality of eligible member user telephone sets [associated with said other ones of said member users].

21. In a communication system in which users communicate through a switched telephone network, a private communication network for facilitating communication among a plurality of member user telephone sets, said private communication network comprising:

a network call manager including:

a telephone network interface for establishing a telephone connection with each of a plurality of telephone lines of said switched telephone network, each of said plurality of telephone lines being associated with one of said plurality of member user telephone sets,

a switch matrix, coupled to said telephone network interface, for providing an information signal received over a selected one of said plurality of telephone lines simultaneously to other ones of said plurality of telephone lines via said telephone network interface, and

controller means for configuring said switch matrix in response to talk request signals received over said plurality of telephone lines; and

a plurality of eligible member user telephone sets, at least some of said eligible member user telephone sets being connected to the private communication network through a wireless communications system, disposed for simultaneous communication over said plurality of telephone lines, each of said eligible member user telephone sets including means for generating one of said talk request signals.

22. The private communication network of claim 21 wherein said controller means including means for identifying said selected telephone line by choosing among ones of said talk request signals received over corresponding ones of said plurality of telephone lines.

23.-39. (Cancelled).

40. (New) A network call manager, comprising:

a network controller operative to:

cause data packets transmitted within a wireless communication system to be processed and routed, the network controller storing therein at least one list of members of at least one push-to-talk (PTT) private network, wherein each of the at least one list is associated with a unique access number operative to allow a calling member to access an associated PTT private network; and

transmit system status information during gaps in transmission by an active calling member, the system status information comprising an indication of the active calling member and a queue of calling members who have provided PTT requests;

a PTT controller operative to cause PTT requests and private network data packets to be processed and routed in accordance with said at least one list; and

a telephone network interface for establishing a telephone connection with the calling member over a channel of said PTT private network.

41.-42. (Cancelled).

43. (New) The network call manager as in claim 40, wherein the PTT controller is operative to receive more than one push-to-talk communications, wherein push-to-talk communications are processed according to an associated priority of each push-to-talk communication.

44. (New) A wireless communication system comprising a network call manager for facilitating communications simultaneously among a plurality of mobile devices of a communication group of wireless devices, the communications group comprising a push to talk (PTT) network, the network call manager comprising:

means for receiving a point-to-point transmission comprising a plurality of voice data packets and a point-to-multipoint transmission comprising a plurality of network data packets;

means for directing point-to-point transmissions;

means for receiving a request from any member of the communications group, the request for initiating a point-to-multipoint transmission to the communications group;

means for directing the point-to-multipoint network data packets exclusively from a current active member of the communications group to other members of the communications group in response to the request; and

means for transmitting system status information during gaps in transmission by the current active member, the system status information comprising an indication of the current active member and a queue of calling members who have provided PTT requests.

45.-50. (Cancelled).

51. (New) A network call manager for enabling push-to-talk (PTT) communications to a communication group of wireless devices, comprising:

an interface to a public switched telephone network for receiving interleaved vocoder frames and PTT frames from a first member user of the communication group, wherein said first member user can be any member of the communication group;

a switch for providing the received vocoder frames to at least a second member user of the communication group and a third member user of the communication group;

a PTT controller for configuring the switch based on a PTT request contained in one or more of said PTT frames; and

a network controller operative to transmit system status information during gaps in transmission by an active calling member, the system status information comprising an indication of the active calling member and a queue of calling members who have provided PTT requests.

52. (New) The network call manager of claim 51, wherein said PTT controller is further for establishing individual forward links with said second member user and said third member user, respectively, through said interface.

53. (New) The network call manager of claim 51 wherein the network controller is configured to page said second member user and said third member user after said PTT request is received.

54. (New) The network call manager of claim 53, wherein the interface comprises:

a data interface connected to the public switched telephone network; and

a modem connected to the data interface, the network controller, the switch, and the PTT controller.

55. (New) The network call manager of claim 53, wherein the interface comprises:

a data interface connected to the public switched telephone network; and

a tone detector connected to the data interface, the network controller, the switch, and the PTT controller.

56. (New) The network call manager of claim 53, wherein the network controller is further for sending a list of current participating member users in a PTT communication to said first member user, said second member user, and to said third member user.

57. (New) The network call manager of claim 53, wherein the network controller is further for sending an identification of a currently active member user to said second member user and to said third member user.

58. (New) The network call manager of claim 51, further comprising a queue for storing a second PTT request from the second member user, the second member user being granted a speaking privilege after the speaking privilege is no longer held by the first member user.

59. (New) The network call manager of claim 53, wherein the network controller is further for authenticating a member user to the communication group.

60.-76. Cancelled.

77. (New) In a network call manager, a method for enabling push-to-talk (PTT) communications, the method comprising:

receiving at least one PTT frame and vocoder frame from a member of a PTT communication network through a public switched telephone network;

granting a speaker privilege to the member in response to a PTT request contained within the at least one PTT frame, wherein the speaker privilege is granted when the PTT request is a first PTT request received subsequent to network speaking privileges being relinquished by a previously active member of the PTT communication network;

establishing at least one forward communication link with at least two other members of the PTT communication network;

providing the at least one PTT frame and vocoder frames from the member to the at least two other members of the PTT communication network through the at least one forward communication link; and

transmitting system status information during gaps in transmission by the member, the system status information comprising an indication of the member and a queue of requesting members who have provided PTT requests.

78. (New) The method of claim 77 wherein providing the vocoder frames from the member to the at least two other members of the PTT communication network comprises configuring a switch to route the vocoder frames to at least two other members of the PTT communication network.

79. (New) The method of claim 77 further comprising authenticating the member prior to granting the speaker privilege.

80. (New) The method of claim 77 further comprising sending a list of active members in the PTT communication network to the at least two other members.

81. (New) The method of claim 77 further comprising:

storing a second PTT request from a second member; and

granting the speaker privilege to the second member after the speaker privilege is no longer held by the member.

82. (New) The method of claim 81, further comprising determining that the speaker privilege is no longer held by the member when the member releases engagement of a PTT switch.

83. (New) The method of claim 81, further comprising determining that the speaker privilege is no longer held by the member upon occurrence of a pause of predetermined duration.

84. (New) The method of claim 77 further comprising:

storing a second PTT request from a second member; and

granting the speaker privilege to the second member according to a predetermined level of priority after the speaker privilege is no longer held by the member.

85. (New) The method of claim 84 further comprising wherein when a PTT request is received from a member of higher priority than a currently active member, preempting the currently active member and granting the speaker privilege to the higher priority member.

86. (New) The method of claim 77 further comprising:

storing a second PTT request and a requested priority from a second member; and

granting the speaker privilege to the second member according to the requested priority and a prescribed limit.

87. (New) A network call manager, comprising:

means for causing data packets transmitted within a wireless communication system to be processed and routed;

means for storing at least one list of members of at least one push-to-talk (PTT) private network, wherein each of the at least one list is associated with a unique access number operative to allow a calling member to access an associated PTT private network;

means for transmitting system status information during gaps in transmission by an active calling member, the system status information comprising an indication of the active calling member and a queue of calling members who have provided PTT requests;

means for causing PTT requests and private network data packets to be processed and routed in accordance with said at least one list; and

means for establishing a telephone connection with the calling member over a channel of said PTT private network.

88. (New) In a network call manager, a method for enabling push-to-talk (PTT) communications, the method comprising:

causing data packets transmitted within a wireless communication system to be processed and routed;

storing at least one list of members of at least one push-to-talk (PTT) private network, wherein each of the at least one list is associated with a unique access number operative to allow a calling member to access an associated PTT private network;

transmitting system status information during gaps in transmission by an active calling member, the system status information comprising an indication of the active calling member and a queue of calling members who have provided PTT requests;

causing PTT requests and private network data packets to be processed and routed in accordance with said at least one list; and

establishing a telephone connection with the calling member over a channel of said PTT private network.

89. (New) A wireless communication system comprising a network call manager for facilitating communications simultaneously among a plurality of mobile devices of a communication group of wireless devices, the communications group comprising a push to talk (PTT) network, the network call manager configured to:

receive a point-to-point transmission comprising a plurality of voice data packets and a point-to-multipoint transmission comprising a plurality of network data packets;

direct point-to-point transmissions;

receive a request from any member of the communications group, the request for initiating a point-to-multipoint transmission to the communications group;

direct the point-to-multipoint network data packets exclusively from a current active member of the communications group to other members of the communications group in response to the request; and

transmit system status information during gaps in transmission by the current active member, the system status information comprising an indication of the current active member and a queue of calling members who have provided PTT requests.

90. (New) In a network call manager, a method for enabling push-to-talk (PTT) communications, the method comprising:

receiving a point-to-point transmission comprising a plurality of voice data packets and a point-to-multipoint transmission comprising a plurality of network data packets;

directing point-to-point transmissions;

receiving a request from any member of the communications group, the request for initiating a point-to-multipoint transmission to the communications group;

directing the point-to-multipoint network data packets exclusively from a current active member of the communications group to other members of the communications group in response to the request; and

transmitting system status information during gaps in transmission by the current active member, the system status information comprising an indication of the current active member and a queue of calling members who have provided PTT requests.

91. (New) A network call manager for enabling push-to-talk (PTT) communications to a communication group of wireless devices, comprising:

means for receiving interleaved vocoder frames and PTT frames from a first member user of a communication group, wherein said first member user can be any member of the communication group;

means for providing the received vocoder frames to at least a second member user of the communication group and a third member user of the communication group;

means for configuring a switch based on a PTT request contained in one or more of said PTT frames; and

means for transmitting system status information during gaps in transmission by an active calling member, the system status information comprising an indication of the active calling member and a queue of calling members who have provided PTT requests.

92. (New) In a network call manager, a method for enabling push-to-talk (PTT) communications, the method comprising:

receiving interleaved vocoder frames and PTT frames from a first member user of a communication group, wherein said first member user can be any member of the communication group;

providing the received vocoder frames to at least a second member user of the communication group and a third member user of the communication group;

configuring a switch based on a PTT request contained in one or more of said PTT frames; and

transmitting system status information during gaps in transmission by an active calling member, the system status information comprising an indication of the active calling member and a queue of calling members who have provided PTT requests.

93. (New) A network call manager for enabling push-to-talk (PTT) communications to a communication group of wireless devices, the network call manager configured to:

receive at least one PTT frame and vocoder frame from a member of a PTT communication network through a public switched telephone network;

grant a speaker privilege to the member in response to a PTT request contained within the at least one PTT frame, wherein the speaker privilege is granted when the PTT request is a first PTT request received subsequent to network speaking privileges being relinquished by a previously active member of the PTT communication network;

establish at least one forward communication link with at least two other members of the PTT communication network;

provide the at least one PTT frame and vocoder frames from the member to the at least two other members of the PTT communication network through the at least one forward communication link; and

transmit system status information during gaps in transmission by the member, the system status information comprising an indication of the member and a queue of requesting members who have provided PTT requests.

94. (New) A network call manager for enabling push-to-talk (PTT) communications to a communication group of wireless devices, comprising:

means for receiving at least one PTT frame and vocoder frame from a member of a PTT communication network through a public switched telephone network;

means for granting a speaker privilege to the member in response to a PTT request contained within the at least one PTT frame, wherein the speaker privilege is granted when the PTT request is a first PTT request received subsequent to network speaking privileges being relinquished by a previously active member of the PTT communication network;

means for establishing at least one forward communication link with at least two other members of the PTT communication network;

means for providing the at least one PTT frame and vocoder frames from the member to the at least two other members of the PTT communication network through the at least one forward communication link; and

means for transmitting system status information during gaps in transmission by the member, the system status information comprising an indication of the member and a queue of requesting members who have provided PTT requests.